

### Claims

1. Apparatus for displaying luminous radiation on a shell (60) of an aircraft (10), comprising  
  
5 at least one light source (20) for producing luminous radiation;  
at least one projection device (50) for converting the luminous radiation into projectable  
luminous radiation;  
  
**characterized in that**  
  
10 the at least one projection device (50) is arranged in the interior (15) of the shell (60), for  
projecting the luminous radiation through the interior (15) on to the shell (60); and  
the shell (60) is translucent at least in portions, for making the projected luminous radiation  
visible from the outside.  
  
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2. Apparatus according to claim 1, characterized in that the at least one light source (20) is  
arranged outside the shell (60), in particular in a loading area (11) of the aircraft (10).
3. Apparatus according to one of the preceding claims, characterized in that at least one light  
20 wave guide (30) is arranged along the shell (60).
4. Apparatus according to one of the preceding claims, characterized in that at least one  
lead-through (40) is arranged at the shell (60) of the aircraft (10) for arranging of at least  
one turret (41), which is translucent and sealed against the interior (15) of the shell (60).  
  
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5. Apparatus according to claim 4, characterized in that the at least one projection device  
(50) is exchangeably arranged in the at least one turret (41).
6. Apparatus for displaying luminous radiation from an aircraft (10), comprising  
  
30 at least one light source (20) for producing luminous radiation;  
at least one projection device (51) for converting the luminous radiation into projectable  
luminous radiation;  
  
35 **characterized in that**

the projection device (51) is adapted for projecting luminous radiation in arbitrarily definable directions.

- 5      7.      Apparatus according to one of the preceding claims, characterized in that the aircraft (10) is an airship.
8.      Apparatus according to one of the preceding claims, characterized in that the at least one light source (20) is a laser light source.
- 10     9.      Apparatus according to one of the preceding claims, characterized in that at least one light wave guide (30) is provided for guiding the luminous radiation from the at least one light source (20) to the at least one projection device (50, 51).
- 15     10.     Apparatus according to one of the preceding claims, characterized in that at least one projection device (50, 51) is adapted for projecting image carrying luminous radiation.
11.     Apparatus according to one of the preceding claims, characterized in that at least one projection device (50, 51) is adapted for projecting effect light.
- 20     12.     Apparatus according to one of the preceding claims, characterized in that at least one projection device (50, 51) is adapted for projecting spatial and/or time variable luminous radiation and/or moving pictures.
- 25     13.     Apparatus according to one of the preceding claims, characterized in that image carrying luminous radiation is composed of several partial images and/or is projected by several projection devices (50, 51).
14.     Apparatus according to one of the preceding claims, characterized in that at least one light source (20) is housed in at least one projection device (50, 51).
- 30     15.     Apparatus according to one of the preceding claims, characterized in that the at least one projection device (50, 51) is adapted for projecting image carrying luminous radiation which is simultaneous with external events.
- 35     16.     Aircraft, in particular airship, comprising at least one apparatus according to one of the preceding claims.

17. Method for displaying luminous radiation on a shell (60) of an aircraft (10), whereby
- luminous radiation is produced by at least one light source (20);
- luminous radiation is converted into projectable luminous radiation by at least one projection device (50);
- characterized in that**
- the light source is projected through the interior (15) of the shell (60) onto the shell (60);
- and
- the projected luminous radiation is made visible from the outside through an at least partially translucent shell (60).
18. Method according to claim 17, characterized in that the light is produced outside the shell (60), in particular in a loading area (11) of the aircraft (10).
19. Method according to claim 17 or 18, characterized in that the luminous radiation is guided from the at least one light source (20) to the at least one projection device (50, 51) through at least one light wave guide (30).
20. Method according to one of claims 17 – 19, characterized in that the luminous radiation is guided through a light wave guide (30).
21. Method for displaying luminous radiation on a shell (60) of an aircraft (10) with the following steps:
- producing luminous radiation by means of at least one light source (20);
- converting the luminous radiation into projectable luminous radiation;
- characterized by**
- projecting luminous radiation in arbitrarily definable directions.
22. Method according to one of claims 17 – 21, characterized in that the aircraft (10) is an airship.

23. Method according to one of claims 17 – 22, characterized in that the at least one light source (20) is a laser light source.
- 5 24. Method according to one of claims 17 – 23, characterized in that image luminous radiation and/or effect light and/or spatially and/or time variable light and/or moving pictures are projected.
- 10 25. Method according to one of claims 17 – 24, characterized in that image luminous radiation is composed of several partial images and/or is projected by several projection devices (50, 51).
26. Method according to one of claims 17 – 25, characterized in that image luminous radiation is projected which is simultaneous with external events.
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